Indian Standard

PLASTICS — METHODS OF TESTING

PART 6 THERMAL PROPERTIES

Section 18 Determination of Temperature of Deflection Under Load — High-Strength Thermosetting Laminates and Long-Fibre-Reinforced Plastics

(First Revision)

1 Scope

This part of ISO 75 specifies a method for the determination of the temperature of deflection under load of high-strength thermosetting laminates and compression-moulded long-fibre-reinforced plastics in which the fibre length is greater than 7,5 mm. The flexural stress used is not fixed, as in ISO 75-2, but is a fraction (1/1 000) of the initial (room-temperature) flexural modulus of the material under test. This allows the method to be applied to materials with a wide range of flexural moduli.

For additional information, see ISO 75-1:2004, clause 1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 75-1:2004, *Plastics — Determination of temperature of deflection under load — Part 1: General test method*

ISO 178, *Plastics — Determination of flexural properties*

ISO 295, *Plastics — Compression moulding of test specimens of thermosetting materials*

ISO 1268 (all parts), *Fibre-reinforced plastics — Methods of producing test plates*

ISO 2818, *Plastics — Preparation of test specimens by machining*

ISO 10724-1, *Plastics — Injection moulding of test specimens of thermosetting powder moulding compounds (PMCs) — Part 1: General principles and moulding of multipurpose test specimens*

ISO 14125, *Fibre-reinforced plastic composites — Determination of flexural properties*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 75-1 apply.

4 Principle

See ISO 75-1:2004, clause 4.